

ABSTRACT OF THE DISCLOSURE

A memory device includes a conductive structure, a number of dielectric layers and a control gate. The dielectric layers are formed around the conductive structure and the control gate is formed over the dielectric layers. A portion of the conductive structure functions as a drain region for the memory device and at least one of the dielectric layers functions as a charge storage structure for the memory device. The dielectric layers may include oxide-nitride-oxide layers.